

East 7/15/04

L Number	Hits	Search Text	DB	Time stamp
	24	("2826273" "2965074" "3053526" "3186702" "3618928" "3628638" "3659835" "3722004" "3732595" "3763971" "US-PGPUB		

	149	("4478431" "5533871" "4407396" "4506869" "5178240" "5588510" "5600111" "5988606" "6079526" "3677561" "4132395" "4388972" "4474271" "4479638" "4480730" "4485899" "4503815" "4560041" "4610332" "4614255" "4782925" "4790522" "4809828" "4834088" "4846317" "4854429" "4867476" "4896752" "4923038" "4934347" "4949989" "4955460" "4961483" "4972928" "4984819" "4985009" "4995635" "5000478" "5016908" "5020825" "5025899" "5178242" "5207145" "5211268" "5217095" "5220983" "5261448" "5261450" "5284083" "5285875").pn. ("5293971" "5328004" "5337863" "5363945" "5398787" "5462141" "5494626" "5497862" "5509512" "5518089" "5518090" "5529152" "5570762" "5593007" "5605121" "5628496" "5657840" "5669418"	USPAT; US-PGPUB	2004/07/15 07:12
Search History	7/15/04 12:03:36 PM	Page 2	C:\APPS\east\workspaces\10743389.wsp	

	0	e05fr003/02.ipc.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:02
	412	e05f003/02.ipc.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:03
	128	e05f005/10.ipc.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:03
	37	e05f005/10.ipc. and (air or pneumatic)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:15
	1	("5157806").PN.	USPAT; US-PGPUB	2004/07/15 07:07
	14	5157806.URPN.	USPAT	2004/07/15 07:07
	4	("3266080" "4230309" "4854554" "4920609").PN.	USPAT	2004/07/15 07:08

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	450	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber) with (serially or series)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:17
	1	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber) with (serially or series) and 312/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:18
	1	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder or brake) with (serially or series) and 312/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:19
	104	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder or brake) and 312/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:20
	1215	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder or brake) same (pistons! or first adj2 piston same second adj2 piston)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:25
	0	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder or brake) same (pistons! or first adj2 piston same second adj2 piston) same progressive adj damp\$6	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:22
	75	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder or brake) same (pistons! or first adj2 piston same second adj2 piston) same piston with (throughbore or bore or borehole or canal)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:24
	13	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same (pistons! or first adj2 piston same second adj2 piston) same piston with (throughbore or bore or borehole or canal)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:24
	419	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder or brake) same (pistons! or first adj2 piston same second adj2 piston) same spring	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:25
	230	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder or brake) same (pistons! or first adj2 piston same second adj2 piston) same spring near5 piston	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:26
	230	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder or brake) same (pistons! or first adj2 piston same second adj2 piston) same spring near5 piston	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:26
	33	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same (pistons! or first adj2 piston same second adj2 piston) same spring near5 piston	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:37
	7	5220706.URPN.	USPAT	2004/07/15 07:30
	2879	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 09:14
	591	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) with piston with (rod or shaft)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:42
	1003	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston with (rod or shaft)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 11:16
	27	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston with (rod or shaft) and (two or pair or series or serially or dual) adj3 pistons!	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:50

	27	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston with (rod or shaft) and (two or pair or dual or series or serially or dual) adj3 pistons!	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 07:51
	7	(air or pneumatic) and 188/283.ccls.	USPAT; US-PGPUB	2004/07/15 07:53
	12	(air or pneumatic) and 188/283.ccls.	USOCR	2004/07/15 07:54
	59	(188/301).CCLS.	USPAT; US-PGPUB	2004/07/15 08:39
	8	4776440.URPN.	USPAT	2004/07/15 08:23
	6	("0334105" "1254106" "1744514" "3218849" "3307842" "3531065").PN.	USPAT	2004/07/15 08:35
	2879	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 08:49
	9	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston and 267/225-226.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 08:41
	258	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston and 267/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 08:42
	235	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston and 188/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 08:42
	235	((air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston and 188/\$.ccls.) not 5.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 08:47
	1064	188/316-317.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 08:47
	20	188/316-317.ccls. and ((air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 08:47
	5	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston and 188/279,286-287.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 08:48
	17	16/66,84.ccls. and pistons!	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 08:49
	5	4693454.URPN.	USPAT	2004/07/15 08:51
	18	("Re16582" "0935525" "1310199" "1834671" "2015757" "2416316" "2574314" "2940111" "3042957" "3147967" "3201110" "3358318" "3550733" "3584331" "3768793" "3991863" "4044865" "4307875").PN.	USPAT	2004/07/15 08:52
	18	3147967.URPN.	USPAT	2004/07/15 08:53
	5	4693454.URPN.	USPAT	2004/07/15 08:54
	7	5558190.URPN.	USPAT	2004/07/15 08:54
	14	("1313763" "2354340" "3107753" "3174343" "3207270" "3260515" "3944221" "4133415" "4164274" "4693454" "4700611" "4880230" "5069317" "5220206").PN.	USPAT	2004/07/15 08:55
	21	4500075.URPN.	USPAT	2004/07/15 08:56
	8	("2276338" "2298542" "2586442" "2618365" "3010433" "3220046" "3369323" "3872541").PN.	USPAT	2004/07/15 09:00
	10	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston and 312/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 09:23

	613	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston and f16f\$.ipc.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 09:26
	0	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston and f16f9/02.ipc.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 09:24
	118	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston and f16f009/02.ipc.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 11:00
	3927	A47B088/16.ipc. or A47B097/00.ipc.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 09:26
	1	((air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston and f16f\$.ipc.) and (A47B088/16.ipc. or A47B097/00.ipc.)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 09:26
	9	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston same furniture	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 09:27
	5	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same pistons! and f16f009/02.ipc.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 09:51
	118	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston and f16f009/02.ipc.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 09:51
	0	2625757.URPN.	USPAT	2004/07/15 10:54
	15	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston with (rod or shaft) and 16/66,84.cccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 11:17
	5	(air or pneumatic) with (damper or dampener or dashpot or vibration or shock adj aborber or retarder) same piston with (rod or shaft) and 16/66,84.cccls.	USOCR	2004/07/15 11:18
	480	16/66,84.cccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 11:18
	26	16/66,84.cccls. not 16/66,84.cccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/07/15 11:18
	454	16/66,84.cccls.	USPAT; US-PGPUB	2004/07/15 11:19

PLUS 7/15/04

Butler, Douglas

From: PLUS
Sent: Tuesday, April 27, 2004 8:51 AM
To: Butler, Douglas
Subject: PLUS Results for 10743359

Here are the PLUS search results for 10743359.

This search was prepared by the staff of the Scientific and Technical Information Center, SIRA. If you have questions or comments about this search, please reply via email to PLUS@uspto.gov.



10743359_QUAL.txt



10743359_LIST.txt



10743359_WEST.txt



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10743359_CLS.txt



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10743359_LIST
PLUS Search Results for S/N 10743359, Searched April 27, 2004

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

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10743359_CLS

Most Frequently Occurring Classifications of Patents Returned
From A Search of 10743359 on April 27, 2004

Original Classifications

6 188/266.6
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4 188/282.5
4 188/315
4 188/322.15
3 188/266.2
3 188/266.5
3 188/269
3 188/281
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Cross-Reference Classifications

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2 310/30
2 417/312
2 417/417

10743359_CLSTITLES
Titles of Most Frequently Occurring Classifications of Patents Returned
From A Search of 10743359 on April 27, 2004

25 188/315 (4 OR, 21 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/297 .Having a thrust member with a variable volume
chamber (e.g., coaxial or telescoping tubes, compensat
ing
reservoir)
188/313 ..With valve controlling fluid flow between
chambers or compartments of the chamber
188/314 ...With reservoir for fluid
188/315Annular reservoir

22 188/322.15 (4 OR, 18 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/322.13 .Valve structure or location
188/322.15 ..Piston valve detail (e.g., seat design,
structural arrangement, metering element)

12 188/317 (2 OR, 10 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/297 .Having a thrust member with a variable volume
chamber (e.g., coaxial or telescoping tubes, compensati
ng
reservoir)
188/316 ..Fluid through or around piston within chamber
188/317 ...Via fixed or variable orifice in piston

11 188/322.13 (2 OR, 9 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/322.13 .Valve structure or location

10 188/280 (5 OR, 5 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/280 .Relative speed of thrust member or fluid flow

10 188/322.14 (2 OR, 8 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/322.13 .Valve structure or location
188/322.14 ..Foot valve

8 188/266.6 (6 OR, 2 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/266.1 .Motion damped from condition (e.g., bump,
speed change) detected outside of retarder
188/266.2 ..Condition actuates valve or regulator
188/266.5 ...Of the pulsating or reciprocating type
188/266.6Side mounted

10743359_CLSTITLES

8 188/269 (3 OR, 5 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/269 .Using diverse fluids

8 188/282.5 (4 OR, 4 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/281 .Resistance alters relative to direction of
thrust member (e.g., high resistance in one direction,
low in the other)
188/282.1 ..Via valved orifice in thrust member
188/282.5 ...Flexible flap-type valve (e.g., compression
washers)

8 188/314 (0 OR, 8 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/297 .Having a thrust member with a variable volume
chamber (e.g., coaxial or telescoping tubes, compensati
ng
188/313 ..With valve controlling fluid flow between
chambers or compartments of the chamber
188/314 ...With reservoir for fluid

8 188/318 (3 OR, 5 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/297 .Having a thrust member with a variable volume
chamber (e.g., coaxial or telescoping tubes, compensat
ing
188/316 ..Fluid through or around piston within chamber
188/317 ...Via fixed or variable orifice in piston
188/318And passage venting fluid external to
chamber

7 188/266.2 (3 OR, 4 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/266.1 .Motion damped from condition (e.g., bump,
speed change) detected outside of retarder
188/266.2 ..Condition actuates valve or regulator

7 188/322.17 (0 OR, 7 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/322.16 .Including seal or guide
188/322.17 ..Between piston rod and cylinder

6 188/266.4 (2 OR, 4 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/266.1 .Motion damped from condition (e.g., bump,
speed change) detected outside of retarder

10743359_CLSTITLES

188/266.2 ..Condition actuates valve or regulator
188/266.3 ...Of the rotary type
188/266.4Having plural openings

6 188/266.5 (3 OR, 3 XR)

Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/266.1 .Motion damped from condition (e.g., bump,
speed change) detected outside of retarder
188/266.2 ..Condition actuates valve or regulator
188/266.5 ...Of the pulsating or reciprocating type

6 267/226 (1 OR, 5 XR)

Class 267 : SPRING DEVICES
267/2 VEHICLE
267/195 .Mechanical spring and nonresilient retarder
(e.g., shock absorber)
267/217 ..Fluid retarder
267/221 ...Helical coil spring
267/226Spring within coaxial fluid chamber

6 267/64.15 (2 OR, 4 XR)

Class 267 : SPRING DEVICES
267/2 VEHICLE
267/64.11 .Comprising compressible fluid
267/64.15 ..With retarder

6 267/64.26 (0 OR, 6 XR)

Class 267 : SPRING DEVICES
267/2 VEHICLE
267/64.11 .Comprising compressible fluid
267/64.15 ..With retarder
267/64.26 ...Having telescoping cylinders

5 188/275 (5 OR, 0 XR)

Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/275 .With fluid regulated in response to inertia of
valve member

5 188/281 (3 OR, 2 XR)

Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/281 .Resistance alters relative to direction of
thrust member (e.g., high resistance in one direction, lo
w
in the other)

5 188/282.6 (2 OR, 3 XR)

Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/281 .Resistance alters relative to direction of
thrust member (e.g., high resistance in one direction,
low
in the other)
188/282.1 ..Via valved orifice in thrust member
188/282.5 ...Flexible flap-type valve (e.g., compression
washers)
188/282.6Having flow passage, cutout, aperture,

10743359_CLSTITLES
slot, etc.

5 188/322.19 (2 OR, 3 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/322.19 .Cylinder structure

5 188/322.22 (0 OR, 5 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/322.22 .Thrust member or piston structure

5 267/64.11 (2 OR, 3 XR)
Class 267 : SPRING DEVICES
267/2 VEHICLE
267/64.11 .Comprising compressible fluid

5 267/64.25 (0 OR, 5 XR)
Class 267 : SPRING DEVICES
267/2 VEHICLE
267/64.11 .Comprising compressible fluid
267/64.15 ..With retarder
267/64.25 ...Having plural compressible fluid springs

4 188/266.7 (2 OR, 2 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/266.7 .Piezoelectric

4 188/282.8 (2 OR, 2 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/281 .Resistance alters relative to direction of
thrust member (e.g., high resistance in one direction,
low
in the other)
188/282.1 ..Via valved orifice in thrust member
188/282.8 ...Spring-loaded valve

4 188/319.1 (1 OR, 3 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/297 .Having a thrust member with a variable volume
chamber (e.g., coaxial or telescoping tubes, compensat
ing
reservoir)
188/316 ..Fluid through or around piston within chamber
188/317 ...Via fixed or variable orifice in piston
188/319.1Having an orifice adjustment for both
jounce or bound (compression) and rebound

4 267/225 (1 OR, 3 XR)
Class 267 : SPRING DEVICES
267/2 VEHICLE
267/195 .Mechanical spring and nonresilient retarder
(e.g., shock absorber)
267/217 ..Fluid retarder
267/221 ...Helical coil spring

10743359_CLSTITLES

267/225 ...Plural mechanical springs for biasing vehicle parts

4 267/64.23 (1 OR, 3 XR)
 Class 267 : SPRING DEVICES
 267/2 VEHICLE
 267/64.11 .Comprising compressible fluid
 267/64.15 ..With retarder
 267/64.23 ...Having flexible wall

4 280/276 (3 OR, 1 XR)
 Class 280 : LAND VEHICLES
 280/29 WHEELED
 280/200 .Occupant propelled type
 280/263 ..With steering
 280/270 ...One-wheel controlled
 280/274 Frames and running gear
 280/275 Yielding
 280/276 Front forks and heads

4 280/5.507 (1 OR, 3 XR)
 Class 280 : LAND VEHICLES
 280/5.5 SUSPENSION MODIFICATION ENACTED DURING TRAVEL
 (I.E., ACTIVE SUSPENSION CONTROL)
 280/5.507 .Lateral and longitudinal vehicle attitude control (e.g., combinations of antidive, antipitch, antiroll, antisquat, antisway, antiyaw, riding, or suspension height)

4 280/5.515 (3 OR, 1 XR)
 Class 280 : LAND VEHICLES
 280/5.5 SUSPENSION MODIFICATION ENACTED DURING TRAVEL
 (I.E., ACTIVE SUSPENSION CONTROL)
 280/5.515 .Suspension stiffness for ride comfort (e.g., damping coefficient, spring rate)

4 417/540 (2 OR, 2 XR)
 Class 417 : PUMPS
 417/437 EXPANSIBLE CHAMBER TYPE
 417/540 .Having pulsation dampening fluid receiving space

4 701/37 (1 OR, 3 XR)
 Class 701 : DATA PROCESSING: VEHICLES, NAVIGATION, AND RELATIVE LOCATION
 701/1 VEHICLE CONTROL, GUIDANCE, OPERATION, OR INDICATION
 701/36 .Vehicle subsystem or accessory control
 701/37 ..Suspension control

3 188/266.1 (2 OR, 1 XR)
 Class 188 : BRAKES
 188/266 INTERNAL-RESISTANCE MOTION RETARDER
 188/266.1 .Motion damped from condition (e.g., bump, speed change) detected outside of retarder

3 188/282.4 (0 OR, 3 XR)
 Class 188 : BRAKES
 188/266 INTERNAL-RESISTANCE MOTION RETARDER

10743359_CLSTITLES

188/281 .Resistance alters relative to direction of thrust member (e.g., high resistance in one direction, low in the other)

188/282.1 ..Via valved orifice in thrust member

188/282.2 ...Valve actuated by electrical system

188/282.4System having distinct selections (e.g., hard, medium, soft)

3 188/284 (1 OR, 2 XR)
 Class 188 : BRAKES
 188/266 INTERNAL-RESISTANCE MOTION RETARDER
 188/284 .Position of thrust member relative to chamber

3 188/285 (1 OR, 2 XR)
 Class 188 : BRAKES
 188/266 INTERNAL-RESISTANCE MOTION RETARDER
 188/284 .Position of thrust member relative to chamber
 188/285 ..Having a fluid flow passage adjusted manually (e.g., threaded plug, threaded rod, gearing)

3 188/298 (1 OR, 2 XR)
 Class 188 : BRAKES
 188/266 INTERNAL-RESISTANCE MOTION RETARDER
 188/297 .Having a thrust member with a variable volume chamber (e.g., coaxial or telescoping tubes, compensatin g reservoir)
 188/298 ..Forming flexible wall enclosure for fluid

3 188/313 (0 OR, 3 XR)
 Class 188 : BRAKES
 188/266 INTERNAL-RESISTANCE MOTION RETARDER
 188/297 .Having a thrust member with a variable volume chamber (e.g., coaxial or telescoping tubes, compensatin g reservoir)
 188/313 ..With valve controlling fluid flow between chambers or compartments of the chamber

3 188/316 (1 OR, 2 XR)
 Class 188 : BRAKES
 188/266 INTERNAL-RESISTANCE MOTION RETARDER
 188/297 .Having a thrust member with a variable volume chamber (e.g., coaxial or telescoping tubes, compensatin g reservoir)
 188/316 ..Fluid through or around piston within chamber

3 267/64.16 (0 OR, 3 XR)
 Class 267 : SPRING DEVICES
 267/2 VEHICLE
 267/64.11 .Comprising compressible fluid
 267/64.15 ..With retarder
 267/64.16 ...Leveling device

10743359_CLSTITLES

3 267/64.17 (3 OR, 0 XR)
 Class 267 : SPRING DEVICES
 267/2 VEHICLE
 267/64.11 .Comprising compressible fluid
 267/64.15 ..With retarder
 267/64.16 ...Leveling device
 267/64.17Self-pumping

3 280/124.157 (1 OR, 2 XR)
 Class 280 : LAND VEHICLES
 280/29 WHEELED
 280/80.1 .Running gear
 280/124.1 ..Suspension arrangement
 280/124.157 ...Fluidic suspension

3 280/5.519 (1 OR, 2 XR)
 Class 280 : LAND VEHICLES
 280/5.5 SUSPENSION MODIFICATION ENACTED DURING TRAVEL
 (I.E., ACTIVE SUSPENSION CONTROL)
 280/5.515 .Suspension stiffness for ride comfort (e.g.,
 damping coefficient, spring rate)
 280/5.519 ..Plural distinct modes (i.e., HARD-SOFT)

3 417/269 (3 OR, 0 XR)
 Class 417 : PUMPS
 417/269 THREE OR MORE CYLINDERS ARRANGED IN PARALLEL,
 RADIAL, OR CONICAL RELATIONSHIP WITH ROTARY TRANSMISSION
 AXIS

2 91/433 (2 OR, 0 XR)
 Class 091 : MOTORS: EXPANSIBLE CHAMBER TYPE
 91/418 WITH MOTIVE FLUID VALVE
 91/433 .Both inlet and exhaust controlled by motive
 fluid pressure in supply line or chamber

2 92/85B (1 OR, 1 XR)
 Class 092 : EXPANSIBLE CHAMBER DEVICES
 92/85R WITH CUSHIONING MEANS EFFECTIVE OVER A PORTION
 ONLY OF STROKE
 92/85B .Fluid spring

2 105/198.3 (2 OR, 0 XR)
 Class 105 : RAILWAY ROLLING STOCK
 105/157.1 TRUCKS
 105/182.1 .Bogie
 105/197.05 ..Sprung bolster
 105/198.2 ...Bolster movement damped by snubber
 105/198.3Hydraulic damping

2 123/90.17 (2 OR, 0 XR)
 Class 123 : INTERNAL-COMBUSTION ENGINES
 123/90.1 POPPET VALVE OPERATING MECHANISM
 123/90.15 .With means for varying timing
 123/90.17 ..Camshaft or cam characteristics

2 123/90.31 (0 OR, 2 XR)
 Class 123 : INTERNAL-COMBUSTION ENGINES
 123/90.1 POPPET VALVE OPERATING MECHANISM
 123/90.31 .Camshaft drive means

10743359_CLSTITLES

2 173/162.1 (2 OR, 0 XR)
Class 173 : TOOL DRIVING OR IMPACTING
173/162.1 INCLUDING MEANS TO VIBRATIONALLY ISOLATE A
DRIVE MEANS FROM ITS HOLDER

2 180/300 (1 OR, 1 XR)
Class 180 : MOTOR VEHICLES
180/54.1 POWER
180/291 .Having specific motor-to-body-frame
relationship
180/300 ..Including means of nonsupporting nature for
minimizing operation-induced movement of motor

2 181/403 (0 OR, 2 XR)
Class 181 : ACOUSTICS
181/403 REFRIGERATOR COMPRESSOR MUFFLER

2 188/266.8 (0 OR, 2 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/266.8 .With failure or malfunction detection

2 188/267.1 (0 OR, 2 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/267.1 .Electroviscous or electrorheological fluid

2 188/277 (2 OR, 0 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/276 .With means compensating for change in
temperature or viscosity
188/277 ..Thermostatic valve type

2 188/282.1 (2 OR, 0 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/281 .Resistance alters relative to direction of
thrust member (e.g., high resistance in one direction, l
OW
in the other)
188/282.1 ..Via valved orifice in thrust member

2 188/282.3 (2 OR, 0 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/281 .Resistance alters relative to direction of
thrust member (e.g., high resistance in one direction,
low
in the other)
188/282.1 ..Via valved orifice in thrust member
188/282.2 ...Valve actuated by electrical system
188/282.3System initiated by a pressure change or
feedback

2 188/282.9 (0 OR, 2 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER

10743359 CLSTITLES

188/281 .Resistance alters relative to direction of thrust member (e.g., high resistance in one direction, low in the other)

188/282.1 ..Via valved orifice in thrust member

188/282.8 ...Spring-loaded valve

188/282.9Adjusting the tension via (a) compressing or expanding or (b) different strength springs

2 188/299.1 (1 OR, 1 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/299.1 .Controlled by an operator (e.g., vehicle driver) remote from retarder

2 188/319.2 (0 OR, 2 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/297 .Having a thrust member with a variable volume chamber (e.g., coaxial or telescoping tubes, compensating reservoir)
188/316 ..Fluid through or around piston within chamber
188/317 ...Via fixed or variable orifice in piston
188/319.2Orifice size varied using a hand or hand tool

2 188/320 (0 OR, 2 XR)
Class 188 : BRAKES
188/266 INTERNAL-RESISTANCE MOTION RETARDER
188/297 .Having a thrust member with a variable volume chamber (e.g., coaxial or telescoping tubes, compensating reservoir)
188/316 ..Fluid through or around piston within chamber
188/317 ...Via fixed or variable orifice in piston
188/320Tortuous path orifice

2 267/122 (0 OR, 2 XR)
Class 267 : SPRING DEVICES
267/113 FLUID
267/118 .Expansile-contractible chamber device
267/122 ..Diaphragm or bellows

2 267/124 (0 OR, 2 XR)
Class 267 : SPRING DEVICES
267/113 FLUID
267/118 .Expansile-contractible chamber device
267/124 ..Piston

2 267/127 (0 OR, 2 XR)
Class 267 : SPRING DEVICES
267/113 FLUID
267/118 .Expansile-contractible chamber device
267/124 ..Piston
267/126 ...System
267/127Trans-piston passage

10743359_CLSTITLES

2 267/221 (0 OR, 2 XR)
Class 267 : SPRING DEVICES
267/2 VEHICLE
267/195 .Mechanical spring and nonresilient retarder
(e.g., shock absorber)
267/217 ..Fluid retarder
267/221 ...Helical coil spring

2 267/4 (0 OR, 2 XR)
Class 267 : SPRING DEVICES
267/2 VEHICLE
267/3 .Railway
267/4 ..Coil

2 267/64.21 (1 OR, 1 XR)
Class 267 : SPRING DEVICES
267/2 VEHICLE
267/64.11 .Comprising compressible fluid
267/64.15 ..With retarder
267/64.16 ...Leveling device
267/64.19Having flexible wall
267/64.21Including rolling lobe between telescoping members

2 267/64.27 (0 OR, 2 XR)
Class 267 : SPRING DEVICES
267/2 VEHICLE
267/64.11 .Comprising compressible fluid
267/64.27 ..Having flexible wall

2 267/64.28 (0 OR, 2 XR)
Class 267 : SPRING DEVICES
267/2 VEHICLE
267/64.11 .Comprising compressible fluid
267/64.28 ..Including means for charging or discharging spring

2 280/124.159 (0 OR, 2 XR)
Class 280 : LAND VEHICLES
280/29 WHEELED
280/80.1 .Running gear
280/124.1 ..Suspension arrangement
280/124.157 ...Fluidic suspension
280/124.158Hydraulic and pneumatic
280/124.159Fluid handling details

2 280/124.16 (0 OR, 2 XR)
Class 280 : LAND VEHICLES
280/29 WHEELED
280/80.1 .Running gear
280/124.1 ..Suspension arrangement
280/124.157 ...Fluidic suspension
280/124.16Fluid handling details

2 280/5.513 (1 OR, 1 XR)
Class 280 : LAND VEHICLES
280/5.5 SUSPENSION MODIFICATION ENACTED DURING TRAVEL
(I.E., ACTIVE SUSPENSION CONTROL)

10743359 CLSTITLES

280/5.513 . Longitudinal vehicle disposition (e.g.,
 antidive, antipitch, antisquat)

2 280/6.159 (2 OR, 0 XR)
 Class 280 : LAND VEHICLES
 280/6.15 BODY ELEVATION OR TILT
 280/6.157 Establishing riding or trim height
 280/6.159 ..Load responsive

2 310/30 (1 OR, 1 XR)
 Class 310 : ELECTRICAL GENERATOR OR MOTOR STRUCTURE
 310/10 DYNAMOELECTRIC
 310/15 .Reciprocating
 310/28 ..Direct-connected
 310/30 ...Solenoid and core

2 417/312 (1 OR, 1 XR)
 Class 417 : PUMPS
 417/312 WITH MUFFLER ACTING ON PUMP FLUID

2 417/417 (1 OR, 1 XR)
 Class 417 : PUMPS
 417/321 MOTOR DRIVEN
 417/410.1 .Electric or magnetic motor
 417/415 ..Reciprocating rigid pumping member
 417/416 ...Reciprocating motor
 417/417 Unitary pump and motor working member

10743359_CLS

Most Frequently Occurring Classifications of Patents Returned
From A Search of 10743359 on April 27, 2004

Original Classifications

6 188/266.6
5 188/275
5 188/280
4 188/282.5
4 188/315
4 188/322.15
3 188/266.2
3 188/266.5
3 188/269
3 188/281
3 188/318
3 267/64.17
3 280/276
3 280/5.515
3 417/269
2 91/433
2 105/198.3
2 123/90.17
2 173/162.1
2 188/266.1
2 188/266.4
2 188/266.7
2 188/277
2 188/282.1
2 188/282.3
2 188/282.6
2 188/282.8
2 188/317
2 188/322.13
2 188/322.14
2 188/322.19
2 267/64.11
2 267/64.15
2 280/6.159
2 417/540

Cross-Reference Classifications

21 188/315
18 188/322.15
10 188/317
9 188/322.13
8 188/314
8 188/322.14
7 188/322.17
6 267/64.26
5 188/269
5 188/280
5 188/318
5 188/322.22
5 267/226
5 267/64.25
4 188/266.2
4 188/266.4
4 188/282.5

4 267/64.15
3 188/266.5
3 188/282.4
3 188/282.6
3 188/313
3 188/319.1
3 188/322.19
3 267/225
3 267/64.11
3 267/64.16
3 267/64.23
3 280/5.507
3 701/37
2 123/90.31
2 181/403
2 188/266.6
2 188/266.7
2 188/266.8
2 188/267.1
2 188/281
2 188/282.8
2 188/282.9
2 188/284
2 188/285
2 188/298
2 188/316
2 188/319.2
2 188/320
2 267/122
2 267/124
2 267/127
2 267/221
2 267/4
2 267/64.27
2 267/64.28
2 280/124.157
2 280/124.159
2 280/124.16
2 280/5.519
2 417/540

Combined Classifications

25 188/315
22 188/322.15
12 188/317
11 188/322.13
10 188/280
10 188/322.14
8 188/266.6
8 188/269
8 188/282.5
8 188/314
8 188/318
7 188/266.2
7 188/322.17
6 188/266.4
6 188/266.5
6 267/226
6 267/64.15

6 267/64.26
5 188/275
5 188/281
5 188/282.6
5 188/322.19
5 188/322.22
5 267/64.11
5 267/64.25
4 188/266.7
4 188/282.8
4 188/319.1
4 267/225
4 267/64.23
4 280/276
4 280/5.507
4 280/5.515
4 417/540
4 701/37
3 188/266.1
3 188/282.4
3 188/284
3 188/285
3 188/298
3 188/313
3 188/316
3 267/64.16
3 267/64.17
3 280/124.157
3 280/5.519
3 417/269
2 91/433
2 92/85B
2 105/198.3
2 123/90.17
2 123/90.31
2 173/162.1
2 180/300
2 181/403
2 188/266.8
2 188/267.1
2 188/277
2 188/282.1
2 188/282.3
2 188/282.9
2 188/299.1
2 188/319.2
2 188/320
2 267/122
2 267/124
2 267/127
2 267/221
2 267/4
2 267/64.21
2 267/64.27
2 267/64.28
2 280/124.159
2 280/124.16
2 280/5.513
2 280/6.159

10743359_CLS

2 310/30
2 417/312
2 417/417